CLAIMS

1. A method for producing a blow molded plastic hollow body having a plurality of vertical ribs on an inner surface thereof, comprising:

extruding an annular parison having axially extending ribs formed along an outer surface thereof, a wall thickness of the annular parison varying along its length;

introducing the parison into a blow mold;

expanding the parison in a blow molding step, such that the outer surface of the parison is pressed against the inner surface of the blow mold, thereby causing the axially extending ribs to be formed as vertical ribs on an inner surface of a hollow body formed in the blow mold.

2. The method according to claim 1, comprising

extruding the axially extending ribs on the parison in four spaced-apart areas;

providing a substantially rectangular blow mold having first and second pairs of parallel side walls joined together at rounded corner areas; and

forming the vertical ribs in four spaced apart areas of an inner surface of a substantially rectangular hollow body, during the blow molding step.

3. The method according to claim 2, comprising forming the vertical ribs only in the rounded corner areas, central regions of the first and second pairs of sidewalls being substantially devoid of the vertical ribs.

4. The method according to claim 2, comprising forming the vertical ribs only in central regions of the first and second pairs of sidewalls, the rounded corner areas being substantially devoid of the vertical ribs.

5. The method according to claim 1, comprising:

forming a bead on the outer surface of the parison, during the extruding step; and

subsequently forming a lateral opening in the blow molded plastic hollow body from said bead.

6. The method according to claim 1, comprising:

extruding additional plastic material to thereby form thicker annular walls at longitudinally spaced apart first and second portions of the parison; and

pinching off the hollow body formed in the blow mold at said first and second portions, after the blow molding step.

7. A method for producing a blow-molded plastic hollow body comprising the steps of:

providing a parison extrusion device having an extrusion end provided with an adjustable nozzle gap formed between cooperating first, second and third control elements on a first side of the nozzle gap and an adjustable mandrel on a second, opposite side of the nozzle gap, wherein the second, and third control elements are selectively and independently movable relative to the first control element;

extruding a tubular parison blank of a thermoplastic material from said parison extrusion device such that:

a wall thickness of the extruded parison increases along its length,

a wall thickness of the extruded parison around its circumference is increased, relative to adjacent areas, in at least two spaced apart longitudinal zones near ultimate pinch-off edges perpendicular to the parison;

a plurality of thickened, longitudinally extending ribs are formed at radially spaced apart predetermined locations along a length of the parison;

introducing the parison blank between open blow-mold halves of a blow-mold; and

expanding the parison blank into a finished hollow body with the aid of a gaseous pressure medium.

8. The method according to claim 7, comprising:

adjusting said first control element to progressively widen the nozzle gap and thereby progressively increase a wall thickness of the extruded parison over its length; and

adjusting the second control element to thereby enlarge the nozzle gap and thereby increase the wall thickness at said two spaced apart longitudinal zones; wherein:

the third control element is provided with a serrated tooth/interstitial-gap profile

configured to partially laterally displace plastic material in the nozzle gap.

9. The method according to claim 8, comprising:

adjusting the third control element to thereby form at least one additional thick spot in at least one preselectable location along the parison.

10. The method according to claim 9, comprising:

forming a lateral fitting in the hollow plastic body from said at least one additional thick spot.

11. The method according to claim 8, wherein gap-delimiting surfaces of the mandrel and the second control element are smooth while gap-delimiting surfaces of the first and third control elements are contoured.

12. The method according to claim 7, comprising:

creating a bead on the parison during the extruding step; and

creating a lateral fitting from the bead during the expanding step.

13. A parison extrusion device having an extrusion end provided with an adjustable nozzle gap formed between cooperating first, second and third control elements on a first side of the nozzle gap and an adjustable mandrel on a second, opposite side of the nozzle gap, wherein:

the first, second and third control elements are adjacent to one another with the first control element being farthest from a nozzle exit from which a parison is extruded, the third control element is closest to the nozzle exit and the second control element is position between the first and third control elements; and

the second, and third control elements are independently movable relative to the first control element.

14. The parison extrusion device according to claim 13, wherein the mandrel is mounted on an axially adjustable mandrel support.

15. The parison extrusion device according to claim 13, wherein the mandrel has a truncated cone shape.

16. The parison extrusion device according to claim 13, wherein:

the third control element is provided with a serrated tooth/interstitial-gap profile configured to partially laterally displace plastic material in the nozzle gap.

17. The parison extrusion device according to claim 13, wherein:

gap-delimiting surfaces of the mandrel and the second control element are smooth while gap-delimiting surfaces of the first and third control elements are contoured.

18. The parison extrusion device according to claim 13, wherein a bottom-most inner edge of the third control element is positioned no lower than a bottom-most outer edge of the mandrel.

19. The parison extrusion device according to claim 13, wherein:

the mandrel is mounted on an axially adjustable mandrel support, the mandrel having a truncated cone shape;

the third control element is provided with a serrated tooth/interstitial-gap profile configured to partially laterally displace plastic material in the nozzle gap;

gap-delimiting surfaces of the mandrel and the second control element are smooth while gap-delimiting surfaces of the first and third control elements are contoured; and

a bottom-most inner edge of the third control element is positioned no lower than a bottom-most outer edge of the mandrel.

20. A parison extrusion device comprising:

an adjustable annular parison exit nozzle having a circular nozzle/mandrel-gap control element; and

adjacent first, second and third differently contoured, exchangeable nozzle/nozzle-gap control elements spaced apart from the circular nozzle/mandrel-gap control element to thereby define an annular extrusion gap; wherein

the second and third control elements are selectively and independently adjustable to

engage a plastic material being extruded into an exiting parison.

21. The parison extrusion device according to claim 20, wherein:

the third control element is provided with a serrated tooth/interstitial-gap profile configured to partially laterally displace plastic material in the nozzle gap.

22. The parison extrusion device according to claim 20, wherein:

gap-delimiting surfaces of the nozzle/mandrel-gap control element and the second control element are smooth while gap-delimiting surfaces of the first and third control elements are contoured.

23. The parison extrusion device according to claim 20, wherein a bottom-most inner edge of the third control element is positioned no lower than a bottom-most outer edge of the nozzle/mandrel-gap control element.